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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
GRANT, CHRISTOPHER C

ART UNIT	PAPER NUMBER
2611	28

DATE MAILED: 08/11/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	09/076,517	LU ET AL.
	Examiner	Art Unit
	Christopher Grant	2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 May 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *70,71 and 159* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *70-71 and 159* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claims 70, 71 and 159 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification fails to support "***An audience rating system....for digital television and radio***" now recited in claim 159.

The specification fails to support the step of "***recording the time that reception by the receiver is ended***" now recited in claim 70.

The above limitations are considered as new matter and they must be canceled from the claims.

3. The amendment filed 8/28/2002 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new

matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

(a) the paragraph bridging pages 48-49 beginning at "As described at Column 16, lines 8-29 of U.S. patent No. 5,481,294" and ending at "(at yet a later time) to a different channel carrying another program".

(b) the paragraph bridging pages 53-54 beginning at "As described at Column 6, lines 9-15 of U.S. patent No. 5,594,934" and ending at "(head-ends for transmitting cable channel and/or the like".

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 70-71 are rejected under 35 U.S.C. 102(e) as being anticipated by Aras et al. (Aras) (of record).

Considering claim 70, Aras discloses an audience measurement method for digital television comprising the steps of:

a) extracting at least one identification code (e.g. a first AVI, 343-567-231 - figure 12) from at least one digital multiplexed stream (col. 6, line 45 - col. 7, line 5) of a first channel, from a control stream (AVI is a control stream or the control stream in MPEG processing described at col. 6, lines 64) of a multiplexed digital transmission, when reception of the first channel by a receiver (1558,1559, 1561) begins (see the entire reference including but not limited to col. 7, line 30 - col. 8, line 37, col. 13, lines 53-58, col. 20, lines 15-33 and col. 24, line 61 - col. 25, line 21);

b) recording the at least one identification code extracted and the time that reception of the first channel begins (see the entire reference including but not limited to col. 8, line 52-col. 9, line 16, col. 14, lines 8-24 and col. col. 20, lines 15-40, wherein the time may be time index (207-figure 2 or 603-figure 12 or start/end times such as 609-start time, 611-end time);

c) extracting at least one identification code (e.g. a subsequent AVI, 565-778-543 - figure 12) from at least one digital multiplexed stream (col. 6, line 45 - col. 7, line 5) of any subsequent channel, from a control stream (AVI is a control stream or the control stream in MPEG processing described at col. 6, lines 64), when reception of the subsequent channel by the receiver begins (see the entire reference including but not limited to col. 7, line 30 - col. 8, line 37, col. 13, lines 53-58, col. 20, lines 15-33 and col. 24, line 61 - col. 25, line 21); and

d) recording the at least one identification code extracted and the time that reception of the subsequent channel begins (see the entire reference including but not limited to col. 8, line 52-col. 9, line 16, col. 14, lines 8-24 and col. col. 20, lines 15-40, wherein the time may be time index (207-figure 2 or 603-figure 12 or start/end times such as 609-start time, 611-end time)

Claim 71 is met by the time information described throughout the entire reference including but not limited to col. 8, line 52-col. 9, line 16, col. 14, lines 8-24 and col. col. 20, lines 15-40, wherein the time may be time index (207-figure 2 or 603-figure 12 or start/end times such as 609-start time, 611-end time).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 159 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aras.

Considering claim 159, Aras discloses that his invention relates to a method and apparatus for collecting subscriber behavior in a broadcast and/or interactive environment (col. 1, lines 15-18) and that the collected information is used for statistical analysis by market research companies (col. 1, line 50 - col. 2, line 41) Aras also discloses that the system can be modified at col. 27, lines 9-11.

However, he fails to specifically disclose that the audience rating system is for radio as recited in the claim.

The prior art is replete with numerous examples of collecting broadcast audience behavior for statistical analysis purposes by Market Research companies. For example, a Market Research company estimating market share to determine advertisement rates. First, note that patents 4,718,106, 4,955,070, WO 91/11062, WO 94/11989, 5,526,427, 5,574,962 (provided by Applicant in the IDS filed 6/22/2001) all disclose collecting behavior from radio and/or

television audiences. Secondly, note that patent 5,594,934 (Lu et) describes audience measurement system for television and radio (See the instant application at page 3, line 5, the IDS filed by applicant on 6/22/2001 and the Declaration provided by Michael Dolan at page 3). Thirdly, television and radio are technically related and are represented by the leading alliance for broadcast signals (National Association of Broadcasters) (See the Declaration provided by Michael A. Dolan at page 3).

It would have been obvious to one of ordinary skill in the art to modify Aras' system (if necessary) to include any broadcast media, such as radio, for the typical advantage of collecting audience behavior for statistical analysis by Market Research companies.

Note to Applicant

8. Some of the references listed in the petition to make special under 37 CFR 1.102 (filed 6/22/2001) were not provided by applicant. Applicant should provide the references and a form 1449 for consideration by the examiner.

Response to Arguments

9. Applicant's arguments filed 5/23/2003 have been fully considered but they are not persuasive.

Response to applicant's arguments

a) Applicant provided several passages from the specification (page 26, 11. 2-8, page 26, 11. 10-14 and page 53, 11. 1-5) and argued that "**It is hard to imagine a more fundamental**

operating system event then shut down which, of course, is clearly a time at which reception by the receiver is ended" (page 2, lines 22-24 of applicant's response/remarks).

In response, the Examiner totally disagrees with Applicant. Page 26, lines 2-8 refer to a computer, analog television and digital television. The passage does not refer to "**recording the time that reception by the receiver is ended**" as now recited in claim 70.

Page 26, lines 10-14 refer collecting tuning data and other data. The phrase other data is not defined and no examples were described. The passage does not refer to "**recording the time that reception by the receiver is ended**" as now recited in claim 70.

The passages on page 26 are related to figure 3 that describe collecting tuning and demographic data to be transferred to a monitoring site. See page 25, lines 10-23.

Page 53, lines 1-5 describe operating system tasks as operating system events. Again, the passage does not refer to "**recording the time that reception by the receiver is ended**" as now recited in claim 70.

It is true that the specification describes creating time stamps records of operating system events. However, the specification only describes the events to be tuning and demographic data. Shutting a television system down is a fundamental event, but so is adjusting the volume, adjusting the color, adjusting closed caption text, selecting the operating language, selecting picture-in-picture, changing the input signal, enabling a parental lock function, browsing the program guide and recording a program. Using Applicant's analysis, the instant invention would include any fundamental television operation under the sun. This would be improper. Nowhere in the original disclosure is there support for "**recording the time that reception by the receiver is ended**" as now recited in claim 70.

b) Applicant provided the passage at page 53, lines 5-7 and argued that "**Since terminating reception is clearly a function of the monitored equipment, it is self-evident that applicants'**

specification provides explicit support for the phrase *"recording the time that reception by the receiver ends"* **as contained in claim 70** " (page 3, lines 6-9 of applicant's response/remarks).

In response, the Examiner again totally disagrees with Applicant. Page 53, lines 5-7 recite "**Indeed, the software agents 112, 118, and 122 may monitor any function of the monitored equipment as long as the desired data is collected**". The specification does not state or even remotely suggest collecting data relating to when the television was shut down. Therefore, television shut down is not monitored. Again, the disclosure describes the monitored events to be tuning, viewing and demographic data such as identity of the viewer. See pages 25-26 and 52-53.

Even if Applicant is correct (the Examiner finds this very much hard to believe) that **terminating reception is clearly a function of the monitored equipment,** the Examiner asserts that the disclosure is still defective because it fails to adequately describe how the software agents monitor the terminating or shutting off function.

It is self evident that the disclosure pertains to identifying the viewer and monitoring what the viewer was watching for statistical purposes. Again, the disclosure does not remotely disclose or even suggest monitoring, collecting or "*recording the time that reception by the receiver ends*" **as now recited in claim 70.**

For all the reasons given above, the Examiner posits that Applicant's arguments are not persuasive.

c) Applicant argues the "**and radio**" issue is supported by page 4, lines 3-5 of the specification at page 3, lines 16-17 of applicant's response/remarks.

In response, the Examiner posits that Applicant's specification (at page 4, lines 3-5) is clearly discussing the prior art and not applicant's invention.

d) Applicant argues that many examples given in the specification involves the detection or collection of audio codes or signatures (page 3, lines 18 – 24) and further argues that "**...a person of ordinary skill in the art would have no trouble recognizing from these disclosures that detecting audio codes and/or collecting audio signatures could readily be performed interchangeably on audio signals output by television speakers and audio signals output by radio signatures. To state otherwise is to lower the level of ordinary skill below the level of common sense**" on page 3, line 25 - page 4, line 5 of Applicant's response/remarks.

(Response), First, the Examiner posits that all references to audio in the disclosure pertain to the audio portion of an audio-video or television program provided via a television receiver.

Secondly, a person of ordinary skill in the art would have a lot of trouble utilizing a regular television receiver to detect radio signals. Television signals are coded differently from radio signals. Using Applicant's analysis the skilled artisan would be able to watch and monitor a video showing Elmer Fudd chasing Bugs Bunny on a typical radio receiver, monitor the audio output of a cell phone and/or monitor music from a speaker in a doll.

Thirdly, at the time of filing the application, Applicant did not disclose or suggest monitoring audio from a radio signal. Moreover, the current application does not describe how radio is utilized in the instant invention.

For all the reasons given above, the Examiner posits that Applicant's arguments are not persuasive.

e) Applicant argues that "**...the Office discharge its responsibility to the public as demanded by law and equity by either reexamining the Massetti Patent on its own initiative, or by**

dropping the Aras rejections in this application and declaring an interference without further delay" on page 5 (third paragraph) of applicant's response/remarks.

(Response) Applicant's request for the Office to initiate reexamination is noted. Applicants are reminded that "Any person at any time may file a request for reexamination by the Office of any claim of a patent on the basis of any prior art cited under the provisions of section 301 of this title". See 35 USC 302.

Applicant's request for interference with a patent 5,974,299 is noted. However, interference cannot be declared at this time because the claims in the instant application are rejected under 35 USC 102, 103 and 112 first paragraphs as described above. Particularly, the question of support for the claims under 35 USC 112 first paragraph should be resolved before any potential interference can be initiated.

f) Applicant argues that "**While Aras certainly discloses extracting an identification code, that code is extracted from a data stream, not a control stream of a multiplexed digital transmission**" on page 6, lines 2-4 of applicant's response/remarks.

In response, the Examiner totally disagrees with the Applicant. First, the AVI is an identification code that is extracted from the control stream of a multiplexed digital transmission. See figures 2 and 3 of the Aras Patent indicating AVM streams. The AVM streams of figure 3 contain control streams where AVIs are located. In other words, the AVIs are multiplexed or embedded between each data set. See columns 7-8. Therefore, Aras discloses extracting an identification code from a control stream as claimed.

Secondly, the Examiner indicated that control streams are also found in MPEG streams. This was made as an alternative point. Note that the rejection of the claims stated "(AVI is a control stream **or** the control stream in MPEG processing described at col. 6, lines 64)". The AVM and AVI may be provided via MPEG streams. The AVIs are codes used as a control

feature in a receiver decoder. That is, the AVI identifies the content of the audio video material (col. 7, lines 30-37). Therefore, AVIs are extracted from a control stream of an MPEG signal.

Thirdly, Applicant argues against the control information in MPEG streams on page 6, lines 7-8 of the response/remarks submitted 5/23/2003. This is inconsistent with Applicant's own arguments (submitted 8/26/2002 at pages 8-10 and the Declaration filed by Michael A. Dolan) indicating that the instant application teaches "control streams" derived by MPEG streams. The Examiner posits that Aras teaches extracting identification codes from control streams of multiplexed digital transmissions as much as Applicant's invention teaches extracting identification codes from control streams of multiplexed digital transmission. If Applicant maintains that Aras does not teach extracting identification codes from control streams, then Applicant's application also does not teach extracting identification codes from control streams.

Response to Amendment

10. Applicant's attempt to re-instate original subject matter into the application is improper. The original subject matter has been marked-up in red ink as instructed by the amendment submitted 8/26/2002. Applicants should submit an amendment (with the original language) to the specification in accordance with 37 CFR 1.121.

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

12. The following are suggested formats for either a Certificate of Mailing or Certificate of Transmission under 37 CFR 1.8(a). The certification may be included with all correspondence concerning this application or proceeding to establish a date of mailing or transmission under 37 CFR 1.8(a). Proper use of this procedure will result in such communication being considered as timely if the established date is within the required period for reply. The Certificate should be signed by the individual actually depositing or transmitting the correspondence or by an individual who, upon information and belief, expects the correspondence to be mailed or transmitted in the normal course of business by another no later than the date indicated.

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to:

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Please refer to 37 CFR 1.6(d) and 1.8(a)(2) for filing limitations concerning facsimile transmissions and mailing, respectively.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Grant whose telephone number is (703) 305 4755. The examiner can normally be reached on Monday-Friday 8:00am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on (703) 305-4380. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872 9314 for regular communications and (703) 872 9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4700.

Christopher Grant
Primary Examiner
Art Unit 2611

CG
August 8, 2003